

Message

From: Strynar, Mark [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=5A9910D5B38E471497BD875FD329A20A-STRYNAR, MARK]
Sent: 2/21/2018 12:07:23 PM
To: Cahoon, Larry [cahoon@uncw.edu]; Mead, Ralph N. [meadr@uncw.edu]; Detlef R. U. Knappe [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=user17c3f77b]
Subject: RE: First Report on the Occurrence and Bioaccumulation of Hexafluoropropylene Oxide Trimer Acid: An Emerging Concern

I cannot other than to say we can see it. I can do a comparison to other PFECAs later to gauge relative concentrations.

Mark

From: Cahoon, Larry [mailto:cahoon@uncw.edu]
Sent: Tuesday, February 20, 2018 4:05 PM
To: Mead, Ralph N. <meadr@uncw.edu>; Strynar, Mark <Strynar.Mark@epa.gov>; Detlef R. U. Knappe <knappe@ncsu.edu>
Subject: RE: First Report on the Occurrence and Bioaccumulation of Hexafluoropropylene Oxide Trimer Acid: An Emerging Concern

Given the apparent toxicological profile of this compound, can anyone share approximate concentrations? Not for public consumption, BTW.

LBC

From: Mead, Ralph N.
Sent: Tuesday, February 20, 2018 12:51 PM
To: Strynar, Mark <Strynar.Mark@epa.gov>; Cahoon, Larry <cahoon@uncw.edu>; Detlef R. U. Knappe <knappe@ncsu.edu>
Subject: Re: First Report on the Occurrence and Bioaccumulation of Hexafluoropropylene Oxide Trimer Acid: An Emerging Concern

Hi Mark,

In several samples collected from CFPUA I have detected it based upon HR MS. Not as the gas phase source dimer though. I will look for that as well.

Ralph

-- Ralph N. Mead Ph.D.
Professor
Dobo 242b
Department of Chemistry and Biochemistry
UNCW
Office: 910-962-2447

From: "Strynar, Mark" <Strynar.Mark@epa.gov>
Date: Tuesday, February 20, 2018 at 12:48 PM

To: Ralph Mead <meadr@uncw.edu>, "Cahoon, Larry" <cahoon@uncw.edu>, "Detlef R. U. Knappe" <knappe@ncsu.edu>

Subject: RE: First Report on the Occurrence and Bioaccumulation of Hexafluoropropylene Oxide Trimer Acid: An Emerging Concern

Ralph,

I looked at both. However, my answer may have changed since this AM. I am now beginning to do a more thorough look as I see some indication of the HFPO-TA as an insource gas phase dimer in some samples. Select effluent samples, select well samples from onsite the Chemours facility, select river sample. This demands more efforts on my part to clarify.

Mark

From: Mead, Ralph N. [<mailto:meadr@uncw.edu>]

Sent: Tuesday, February 20, 2018 12:07 PM

To: Strynar, Mark <Strynar.Mark@epa.gov>; Cahoon, Larry <cahoon@uncw.edu>; Detlef R. U. Knappe <knappe@ncsu.edu>

Subject: Re: First Report on the Occurrence and Bioaccumulation of Hexafluoropropylene Oxide Trimer Acid: An Emerging Concern

Mark,

Which samples are you talking about? Waste stream from Chemours facility or int he river?

Ralph

-- Ralph N. Mead Ph.D.

Professor

Dobo 242b

Department of Chemistry and Biochemistry

UNCW

Office: 910-962-2447

From: "Strynar, Mark" <Strynar.Mark@epa.gov>

Date: Tuesday, February 20, 2018 at 7:32 AM

To: "Cahoon, Larry" <cahoon@uncw.edu>, "Detlef R. U. Knappe" <knappe@ncsu.edu>, Ralph Mead <meadr@uncw.edu>

Subject: RE: First Report on the Occurrence and Bioaccumulation of Hexafluoropropylene Oxide Trimer Acid: An Emerging Concern

All,

I have looked for this compounds in the samples we have received in the Cape fear River all summer. I have yet to see a definitive response in any sample. However, it demands a more thorough look. My guess is it would be significantly less soluble than HFPO-DA and would likely be found more in sediment and or bio-accumulate in fish. Both have not yet been looked at by me or anyone else I am aware of.

According to my discussions with Dupont and Chemours chemists they are aware this compound is quite bio-accumulative and has toxicology. Thus they avoid the production. As it would be made to some degree by the process of dimerizing HFPO to the DA, some HFPO-TA is likely made. My understanding is they are able to capture the HFPO-TA and convert it to CAS 3330-14-1 (essentially the decarboxylated form of HFPO-TA) to be used as a solvent for Nafion synthesis on site. This tells me it is made on site but dealt with. My question would be to what degree and how well is it or has it been dealt with.

Mark

From: Cahoon, Larry [<mailto:cahoon@uncw.edu>]

Sent: Monday, February 19, 2018 11:16 AM

To: Detlef R. U. Knappe <knappe@ncsu.edu>; Strynar, Mark <Strynar.Mark@epa.gov>; Mead, Ralph N. <meadr@uncw.edu>

Subject: FW: First Report on the Occurrence and Bioaccumulation of Hexafluoropropylene Oxide Trimer Acid: An Emerging Concern

Hi guys, are we at all likely to see this stuff in the CFR?

LBC

From: Kathleen Gallagher [<mailto:gallagherkm1@gmail.com>]

Sent: Sunday, February 18, 2018 11:08 AM

To: Cahoon, Larry <cahoon@uncw.edu>

Subject: First Report on the Occurrence and Bioaccumulation of Hexafluoropropylene Oxide Trimer Acid: An Emerging Concern

<https://pubs.acs.org/doi/abs/10.1021/acs.est.7b02259>

FYI